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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,282	04/15/2002	Shankar Subramanian	PER0020	2887

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EXAMINER

TUCKER, PHILIP C

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,282

Applicant(s)

SUBRAMANIAN ET AL.

Examiner

Philip C. Tucker

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-11, 13-24 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-22 and 30 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 13, 14, 23, 24 and 32 is/are rejected.
- 7) ☒ Claim(s) 26-29, 31 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: A part of the structure is missing on page 6.

Appropriate correction is required. *SEE ATTACHMENT.*

Claim Objections

2. Claims 31-33 are objected to because of the following informalities: Claim 31, line 2, contains the word "slat", wherein the word "salt" was intended to be used.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-4, 13 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has added a "comma" to the 5th line of claim 1, thus separating "alkyl amnie" and "alkylene". This is new matter,

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since the specification only supports an alkyl amine alkylene group, and not separate groups.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4, 6-11, 13, 14 and 32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, applicant has added in part c) about 0.1 to about 5% of a counter ion which can be an organic salt or an organic acid, but since part b) may comprise organic salts and organic acids, the scope of the total composition is not clear. In reviewing applicants specification, it is believed that the "counterion" which is X, is not the actual organic acid or salt, but the organic anion formed from such acid or salt. In claim 32, the term "further comprising" is used, whereas claim 31 already teaches inorganic or organic salts.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 6-8, 10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoeffkes (4898725).

Hoeffkes teaches an aqueous composition which comprises an alkyl amido quaternary salt within the scope and amount of the present invention (see claim 4). With respect to claim 2, a sulfonate or sulfate may be used in the composition (column 7, 37-39). The LANOQUAT DES 90 taught in the formulation in column 10 is within the scope of the compound of present claim 1 (see bottom of column 8). Such formulation further teaches the use of alcohols and organic acids. Claim 1 teaches that the acid may be present at levels within the scope of the present invention. Applicants intended use does not distinguish over the prior art (In re Pearson 181 USPQ 641).

9. Claims 1, 3, 5-8, 10, 12, 13, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Singer (5019281).

Singer teaches an aqueous composition which comprises an alkyl amido quaternary salt within the scope of the present invention, which can have particulate wax suspended therein (see examples and claim 2). The composition is moved and used, thus satisfying the word "transported" in claim 24. Without further definition of the

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type of "cutting material", such is not seen as distinguishing. Applicants intended use does not distinguish over the prior art (In re Pearson 181 USPQ 641).

10. Claims 1-3 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Norman (5551516).

See example 3 which teaches the same components as the present invention. Applicants amendment to separate alkyl amine from alkylene in claim 1 resulted in this rejection. Such would have thermal stability as claim 13.

11. Claims 1-3, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Teot (4725372).

Teot teaches a brine, within the scope of claim 14, which can comprise the same components as the present invention (see examples 1-3). Applicants amendment to separate alkyl amine from alkylene in claim 1 resulted in this rejection. Such would have thermal stability as claim 13.

12. Claims 1, 3, 13 are rejected under 35 U.S.C. 102(e and a) as being anticipated by Nakama (5866040).

Nakama teaches a water based composition which comprises a cation within the scope of the present invention wherein R2 is alkyl sulfonate (see compound (B) in claim 1, and the formulations in examples 29 and 30. Various acids such as methylbenzoic acid, linoleic acid and lauric acid are added to the water based formulations. Such

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further contains various alcohols. Such would have thermal stability as claim 13.

Applicants intended use does not distinguish over the prior art (In re Pearson 181 USPQ 641).

13. Claims 1, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Schoenberg (4168302).

Schoenberg teaches an aqueous composition which comprises isostearylamidopropyl morpholine lactate which can be used in formulations such as that at the bottom of column 5, comprising citric acid and other organic salts.

14. Claims 26-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Claims 15-22 and 30 are allowable over the art of record.

16. Applicants arguments have been considered but are not deemed fully persuasive. As noted by applicant, although Muzyczko teaches the surfactant, an alcohol and acid in combination, such is not taught at the specified levels of the present claims and are thus distinguished. With respect to Hoeffkes, applicant questions the rejection under 35 USC 102 (b), and highlights the word "optionally". However, Hoeffkes teaches a specific example using the cationic surfactant in the formulation at

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the top of column 10. As such is exemplified, a rejection under 35 USC 102 is deemed proper. Again with respect to Singer, the reference in example I teaches the components within the scope of the current claims. It is again noted that an intended use does not distinguish over the prior art (In re Pearson 181 USPQ 641). Without further definition of the cuttings in claim 23, such is not seen as distinguishing from the wax of Singer.


17. Applicants amendment has introduced new matter as shown above. New rejections are presented in this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

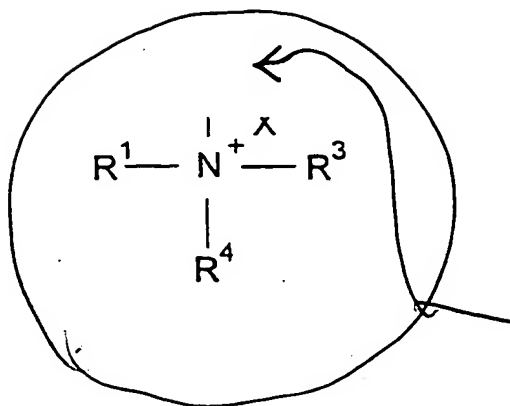
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Philip C Tucker
Primary Examiner
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PCT-3864

ATTACHMENT TO
OFFICE ACTIONPart of the
structure at
the top is
missing

(I)

5

where R¹ is alkyl amine alkylene, alkyl amido alkylene, alkyl ether alkylene or alkyl ester alkylene where the alkyl group contains 1-26 carbon atoms and the alkylene group preferably contains 1 to 8 carbon atoms; R² and R³ are each alkyl, hydroxy alkyl, polyalkoxy with the degree of polymerization ranging from 2-30, alkyl sulfonate, hydroxyalkyl sulfonate or alkylaryl sulfonate; R⁴ is hydrocarbon such as alkyl, aryl, aralkyl, alkaryl and can be saturated or unsaturated; or wherein any two of R², R³ and R⁴, together with the nitrogen atom to which they are attached, form a heterocyclic ring containing 2 to 5 carbon atoms and 1 to 6 sulfur atoms such as sulfur (S), nitrogen (N), oxygen (O) or silicon (Si); and X is selected from the group consisting of halides; oxo ions of phosphorous, sulfur or chloride; and various organic molecules.

In some preferred embodiments of the present invention, R¹ is alkyl amine alkylene or alkyl amido alkylene, and/or R² and R³ are each alkyl or hydroxy alkyl.

Examples of suitable alkyl groups, R², R³ or R⁴ include methyl, ethyl, propyl, butyl, hexyl, allyl, benzyl, vinyl benzyl, and the like, including *iso*-propyl, *iso*-butyl, *sec*-butyl, *tert*-butyl, and so forth. Examples of suitable hydroxy alkyl groups include 2-hydroxyethyl-2-hydroxypropyl and 2,3-dihydroxypropyl. Examples of heterocyclic rings which may be formed by combination of two of R², R³ and R⁴ include morpholine, piperidine, piperazine, and so forth. Polyalkoxy groups are preferably ethyl, propyl or butyl.

Alkyl sulfonate may also be referred to as sulfobetaines and hydroxyalkyl sulfonates may also be referred to as sultaines. An example of a sulfobetaine is propyl sulfonate and an example of a sultaine is 2-hydroxypropyl sulfonate.

The thickening agent is employed in an amount which in combination with